About Buying a Computer

The options and suggestions are that of the author and do not necessary reflect that of Enfield's Information Technology Department

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Why?

- If you decide to purchase a computer, make sure you use it! So often I see computers that languish in dusty corners of a home because no one has taken the initiative to actually use them. Too often computers are bought as status items rather than work tools. Don't let this happen to you. Get the training and assistance necessary to make the computer a productive partner and not a paperweight.
- Overall, when purchasing a computer you have to use a little common sense. Don't let the salesperson talk you into something you hadn't budgeted for or don't need. If you don't understand what something is, don't buy it. If the salesperson gets snotty, walk out. The biggest weapon you have in your arsenal is the ability to walk away from the deal if it doesn't meet your needs.
- Good luck and good shopping!

What to Consider Before...

- How will you use the computer? Do you plan to write papers using word processing software, keep photographs, keep track of your finances or business on a spreadsheet, send electronic mail (e-mail) to relatives across the country, surf the World Wide Web, or just play computer games?
- Knowing how you'll use your computer will help you determine what type of minimum requirements the computer needs to have.

Buying a Home Computer

- Buying a home computer can be a bit like buying a car-it's a major purchase decision. There are many makes and models, and many people willing to give advice about what to buy and where to buy it.
- To make the most of your shopping experience, and sense of the variety of choices facing you, you'll want to do your homework before heading out.
- Whether buying new or used, know what you want the computer to do for you and how much you can afford to spend
- You don't have to buy the biggest, fastest or most powerful computer on the market, but you should buy the best system you can- that includes monitor, microprocessor, memory, hard drive, keyboard, printer, camera, etc.
- You might want to hold off buying any software until you've had a chance to take a look at the software which should come with your new computer

Laptop vs. Desktop Models

- After you've made all the decisions about what you want in a computer, you also can choose what type of model you'd like: laptop or desktop.
- Laptop models are portable, and if you travel a lot and need to bring your computer along, this is the obvious choice.
- Desktops have larger screens (although you can use a larger screen with a laptop model) and are easily expandable.
- Laptops are generally regarded as companion computers to desktops, but they are sophisticated enough to be your primary computer. There are some laptops, called notebooks, that weigh less than five pounds.

Buying Local or Mail Order

- You have two options when buying a computer: You can purchase your equipment locally or through mail order. They both have advantages. If you buy from a consumer electronics dealer in your area, you can often get free demonstrations, and you can return to ask questions and buy additional equipment. Mail order computers are generally less expensive. If you have questions, you can call the company's customer service number and speak with a technician on the telephone. If you need to return the computer for repairs, you may have to ship it back to the manufacturer (save the original box and packing materials).
- Investigate both local and mail-order sources and buy from the one you feel most comfortable with.

Computer Terminology

- **Cache:** Cache is another type of memory kindred to RAM. Cache is used by the computer to quickly move data between the RAM and the CPU.
- **CD-ROM Drive:** Most new computers now come with a CD-ROM drive as standard equipment. A CD-ROM drive reads data from a disc. These CDs look like a music CD, but hold data instead of music. CD-ROMs also contain games, dictionaries, recipe files . . . the list is endless.
- **CPU:** The CPU, or central processing unit, is the brains of the computer. Most new Windows based programs use a Pentium processor. New Macs use a different type of CPU called Power PC. (CPU, or Central Processing Unit, is the brains of the computer)
- **Disk Drive:** Virtually all computers use to come with a disk drive that can read and save information on portable diskettes, also called floppy disks. You can use floppy disks to save information or to load new software onto your computer (they cost extra now, everyone is switching to portable USB flash drives).

Computer Terminology – cont.

- **Hard Drive:** The hard drive also is called the hard disk. You'll probably never see it because it is nestled inside your computer. It's the computer's electronic filling cabinet, and it stores the computer's operating system, files, programs and documents.
- **Keyboard:** Just like a typewriter keyboard, this device is the primary way of inputting data into many programs. (keyboard is the primary way of inputting data into many programs)
- **Megahertz (MHz):** This is the clock speed of the microprocessor. The higher the number, the quicker the information is processed. MHz relates to how many millions of instructions can be processed per second.

Computer Terminology – cont.

- **Memory:** This is the circuitry or device that holds information in an electrical or magnetic form. There is read-only memory (ROM), which is information primarily stored on a disk, and random-access memory (RAM), which is chip-based storage inside the computer. Memory is typically measured in megabytes (MBs).
- **Modem:** This mechanism connects a computer to a phone line so information can be sent from one computer to another or the user can access an on-line service or the Internet. In view of the popularity of the Internet, a modem is now considered basic equipment and comes on practically all new computers. Most modems come with fax capabilities.
- **Monitor:** An output device that allows you to see what you are doing. Most computers come with 14 or 15 inch monitors. This size is good for most people's needs. Larger 17 or 21 inch monitors also are available, but may cost more.

Computer Terminology – cont.

- **Motherboard:** The motherboard is the circuit board that everything in the computer plugs into. The CPU, RAM and cache all plug into the motherboard.
- **Mouse:** The mouse is another input device that makes getting around in your computer easier. It is a handheld object that is good for doing tasks such as moving and pointing to objects on the screen, and can replace the function and control keys of the keyboard.
- **Printer:** A printer is an essential part of the computer if you want a hard copy of your work. There are four types of printers on the market: inkjet, bubble jet and laser. Most inkjets and bubble jets can print color and graphics, and a laser printer offers the best resolution at the highest speed. There's a new 3in1 model which prints, faxes and copies.

Computer Terminology – cont.

- **RAM:** Computers save data in two ways: on the hard drive and in random access memory or internal memory. New computer buyers should look for models with at least 256 MBs of RAM
- **Scanner:** A scanner is a useful accessory to have if you are working with lots of artwork or photos. This device can copy written documents, pictures or photographs directly into your computer. There are three types of scanners: handheld, hopper-feed and flatbed.
- **Sound Card:** This device allows your computer to reproduce music, sounds and voices. Make sure you have a sound card if you're planning to play multimedia games.
- **Video Card:** The video card is the part of the computer that sends the images to the monitor.

Warranty & Service Plans

- Look for a computer with a warranty that covers manufacturing defects and other problems. Make sure you understand exactly what is covered under the warranty. Most new computers are covered for a year, and some warranties include on-site maintenance.
- Many retailers offer extended service agreements which, in essence, lengthen the warranty. Whether or not you purchase an extended service plan is up to you. Find out what is covered and weigh the price of the warranty against the price of potential repairs.

Recommended Specifications

- **Minimum**
- Pentium 1.2 MHz CPU
- 256 MB RAM
- 20 GB hard drive
- CD-ROM drive
- MS XP Home
- 56K Modem
- Free Virus Protection software
- Spyware Blocker
- Printer
- USB Flash drive – 64MB
- Regular Monitor
- Surge Protector

- **Recommended**
- Pentium 2.0 MHz CPU+
- 512 MB RAM
- At least a 40 GB hard drive
- DVD/CD-RW drive
- MS XP Professional
- 56k Modem (Cable/DSL)
- Free Virus Protection software
- Spyware Blocker
- 3 in 1 Printer
- USB Flash drive -256MB+
- Flat Screen Monitor
- Battery Backup/Surge Protector
- USB Port Hub
- Camera, cheap one

Some Assembly Required…

- The computer components are not going to jump out of their boxes, connect themselves, plug into the outlet and turn itself on!
- A normal assembly time of two to three hours is needed to get a new system operational. A first time owner might require double the time.
  - If transferring files/data/pictures from another computer, add at least another one to two hours.
- Follow the instructions, don't guess or think you know what wire plugs into something else.
- Remember to check for all the upgrades for the software installed!
- If you are planning to use the internet, have you selected a provider and decided on phone, cable or DSL? It's nice if they is done before the computer arrives.

Protect Your Computer

- Your computer is an expensive piece of equipment, so protect it from power surges with a surge protector. A surge protector will blow a fuse if it gets hit by a rush of electricity, thus protecting your computer.
- If you're using a modem, be sure to get a surge protector with a telephone jack included.
- Don't expect your surge protector to safeguard your computer against a direct lightning strike.
- The only sure protection against lightning strikes is to unplug your computer and modem during a thunderstorm.

Protect Your Data

- The best way to safeguard the data on your computer (including software) is to back it up onto a disk (CD-ROM R/W works nicely). If your hard disk fails, at least it won't take all your software and information with it-as long as you've backed them up. Make periodic copies of the information on the hard disk.
- It's also important to protect your data from viruses. Anytime you use a disk to install a new program, copy files or download a file from the Internet, you are susceptible to a computer virus.
- It's a good idea to install a virus protection software program on your computer that will review each new file and check for viruses.

Free Software

- **AVG** Free Edition is the well-known anti-virus protection tool. **AVG** Free is available free-of-charge to home users for the life of the product!
  - http://www.grisoft.com/doc/1
- **Spybot** - Search & Destroy - Search your hard disk and registry for threats to your security and privacy
  - http://www.safer-networking.org/en/index.html
- **OpenOffice** - An office suite package just like MS Office, only free. Can read and create MS Office type files.
  - http://www.openoffice.org/
- **CCleaner** (Crap Cleaner) is a system-optimization tool that removes unused and temporary files from your system, allowing it to run faster and more efficiently, and giving you more hard-disk space.
  - http://www.ccleaner.com/
- **PrintKey 2000** will print screens like the desktop, parts of a screen, or the active window from any application.
  - http://www.webtree.ca/newlife/printkey_info.htm
- **Picasa** is software that helps you instantly find, edit and share all the pictures on your PC
  - http://www.picasa.com/index.php?tid=Y2NpZD0zNzQ4